DECEMBER
JANUARY
1939-40

PHOTO SPOTLIGHT

PUBLISHED BY
EASTMAN KODAK STORES, INC.
MADISON AVE. AT 45TH ST., 235 W. 23RD ST., NEW YORK, N. Y.

Built for Stability **AND CONVENIENCE**

THE Eastman Commercial Tripod Stand is not only strong, sturdy, and rigid but has a wide range of adjustments. It may be raised from 3 feet 4½ inches to 7 feet 4 inches. Its aluminum top, 10 x 13 inches, is mounted on a ball-and-socket joint which permits tilting the camera at any angle. Vise-handle tighteners assure rigid locking of all adjustments. The entire stand weighs only 31¾ pounds and is priced at $45—See it at your dealer's.

EASTMAN KODAK COMPANY, Rochester, N. Y.

Improved
EASTMAN METAL TRIMMERS

ACCURACY, durability, and ease of operation are the salient features of these fine, all-metal trimmers that are built for practically a lifetime of useful service in your workroom. The self-sharpening knife of tempered steel is shaped and mounted to cut with the minimum of effort, while the attached brass ruler assures accuracy. A new feature is a counterbalance spring which holds the handle so that the blade is always in cutting position. The beds of the trimmers are marked off in half-inch squares formed by depressed lines in the metal. The finish is a lasting black enamel. Supplied with each trimmer is a transparent trimming gauge to facilitate trimming prints with white margins up to 1 inch. Prices: No. 10, 10-inch, $18.00; No. 15, 15-inch, $25.00; No. 20, 20-inch, $32.50.

Wide Margin Transparent Trimming Gauge (for maximum margins of 2¼"), $1.50.

EASTKO TRIMMERS

For a fine, medium-priced trimmer, buy the Eastko. It has a metal base, wood bed and rule, fine steel blade and counterpoised handle. Made in three sizes: No. 3, 10-inch, $6.50; No. 4, 12-inch, $7.50; No. 5, 15-inch, $8.50. Transparent Trimming Gauges, 1-inch, 75c each. Wide Margin Trimming Gauges for the Nos. 4 and 5 Trimmers are $1.50 each.

EASTMAN KODAK STORES

NEGATIVE ON EASTMAN SAFETY
PORTRAIT PANCHROMATIC ANTI-HALATION FILM

DEVOTED TO THE INTERESTS OF
PROFESSIONAL PHOTOGRAPHERS
VOLUME XVIII • NUMBER 3
DEC., 1939—JAN., 1940

The Season's Greetings

In keeping with time-honored custom we welcome the opportunity at this season of the year to express our thanks for your patronage and to extend best wishes for

A Merry Christmas and Happy New Year

EASTMAN KODAK STORES

SCIENTIFIC DATA ON PHOTOGRAPHIC EMULSIONS

PHOTOGRAPHERS are becoming increasingly conscious of technical aspects of photography which a few years ago would have been practically meaningless to the average worker. Obviously, the reason for changed thinking is due to the great advances made in photographic materials and technique, and the need for more exact scientific data to enable the photographer to work more intelligently, and produce finer results with greater certainty.

For example, it has become quite common to show the color-sensitive characteristics of a film emulsion by a wedge spectrogram. These spectrograms are prepared by exposing a section of film to a light spectrum through a neutral density wedge. This wedge is opaque at the top, wedging off in density or opacity until it is transparent at the bottom. As the transmitted light of the spectrum diminishes towards the top, the height of the image at any point is an indication of the film's response to that particular color. The spectrogram, therefore, is an indication of the relative sensitivity of the material to the various colors of the spectrum, but gives no indication of emulsion speed or other characteristics.

It will be noted in these spectrograms that a scale at the lower edge reads from a point below 40, to a point beyond 70, the latter being visible only in spectrograms of extremely red or infrared sensitive materials. These figures, from which a cipher has been dropped for convenience, indicate wave lengths of light which place the colors of the spectrum in their relative positions.

To have a better understanding of light rays one should know something about the great electromagnetic spectrum of which visible light is but a small band. Electromagnetic radiation, or wave motions in the ether, are of various forms and are indicated in the spectrum in the following order: cosmic rays, gamma rays, x-rays, ultraviolet rays, visible light rays, infrared rays, hertzian waves, radio waves, and long electrical oscillations. These waves differ from one another only in their wave length and frequency.

Those rays of wave lengths between 400 and 700 millimicrons (mμ) are visible light. The millimicron is used for measuring light rays because ordinary units of measurement would be too cumbersome. A millimicron, designated mμ, is one millionth of a millimeter, and a millimeter is practically one twenty-fifth of an inch. Color is a matter of wave length, the rays from 400 to 500 mμ giving the sensation of blue, 500 to 600 mμ green, and 600 to 700 mμ red. When you see all of these waves combined and in the proper proportions, as in the light from the sun, the light is said to be white. Eliminate the rays of a given wave length and

the white light becomes colored.

Objects are of various colors only because they reflect light rays of various wave lengths. The brightest flower in your garden may be red. This is because it absorbs the blue and green of sunlight and reflects only red, but until fairly recent years the ordinary photograph would not show it as a bright flower. It would look to be almost black. Early materials were not sensitive to red.

The average normal eye is sensitive to all colors, but this is not necessarily true of photographic films. In fact, plain silver bromide, the fundamental sensitive element in all negative emulsions, is sensitive only to blue and ultraviolet. Incorporated in modern orthochromatic, panchromatic, and infrared emulsions, however, are sensitizing dyes, the purpose of which is to render the film sensitive to other colors of light than blue and ultraviolet.

There are at present six commonly used types of film: The noncolor-sensitized has only the blue-violet and ultraviolet sensitivity inherent

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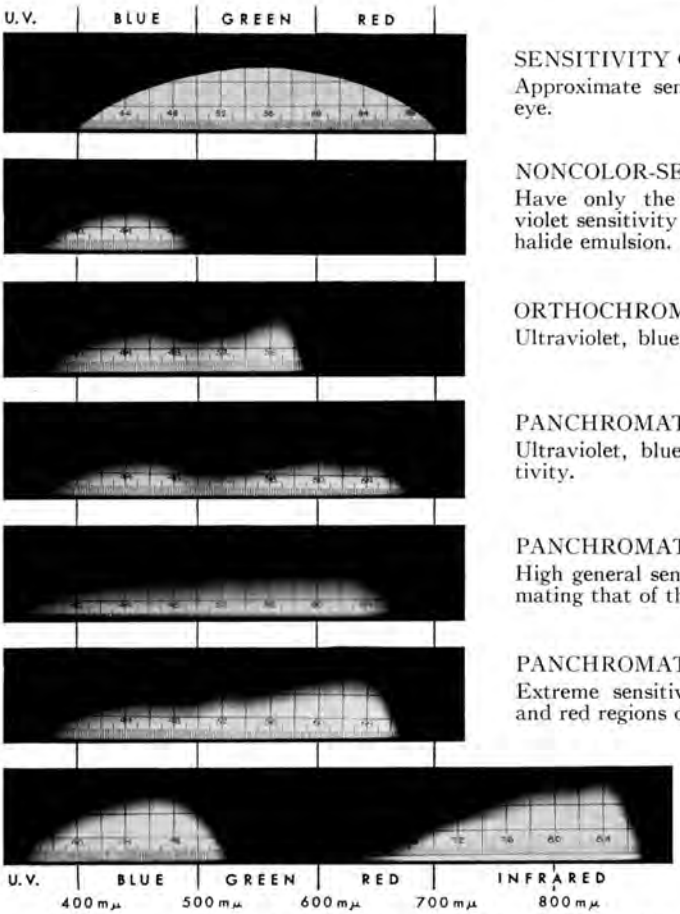

SENSITIVITY OF THE EYE
Approximate sensitivity of the normal eye.

NONCOLOR-SENSITIZED
Have only the ultraviolet and blue-violet sensitivity inherent in every silver halide emulsion.

ORTHOCHROMATIC
Ultraviolet, blue, and green sensitivity.

PANCHROMATIC TYPE A
Ultraviolet, blue, green and red sensitivity.

PANCHROMATIC TYPE B
High general sensitivity closely approximating that of the eye.

PANCHROMATIC TYPE C
Extreme sensitivity in yellow, orange, and red regions of the spectrum.

INFRARED
Sensitive to blue-violet and invisible infrared region.

Figure 5. Spectrograms showing color sensitivity of Kodak film sensitizing types to tungsten light.

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in every silver halide emulsion. The orthochromatic has ultraviolet blue and green sensitivity. The panchromatic, Type A, has ultraviolet, blue, green, and red sensitivity, and while it covers the whole spectrum it is one of the earlier types of panchromatic emulsions which is not as high in green sensitivity as the later types. The panchromatic Type B has high general color sensitivity closely approximating that of the eye. The panchromatic Type C is completely color sensitive but its spectrogram has a decided hump at the red end, showing that it has extreme sensitivity in the yellow, orange, and red regions of the spectrum. This naturally increases its speed when it is used with artificial light, which is especially rich in these colors. Most peculiar of all spectrograms of films is that of the infrared. This shows two separate bands of sensitivity, one in the blue region of the spectrum and the other beyond the visible spectrum in the infrared. Obviously then, if one wishes to make a negative entirely by invisible infrared light, it is only necessary to use a red filter, which will absorb all of the blue light. The red filter does not absorb infrared, so its use doesn't reduce the film's speed to infrared light. This film gives great clarity to distant landscapes because all haze, caused by reflected light, is eliminated. It gives beautiful contrast between clouds and sky because the sky reflects no infrared and photographs black.

The spectrogram for any material, therefore, enables one to have a good idea of its color sensitive characteristics before it is used. Its contrast and gradation characteristics are shown by sensitometric curves. With speed and recommended meter settings, filter factors, recommended development, and time and temperature development curves, the photographer of today has a picture of the material he uses such as he never had before.

All of this information is important, and as photography continues to advance, the man who keeps up with a technical knowledge of the materials he uses will know most surely how to obtain the results he wants.

» » ● « «

PHOTOFOIL REFLECTOR DISK FOR EASTMAN HEAD SCREEN

THIS accessory for the Eastman Head Screen consists of a double-coated sheet of 1/16-inch board of 15-inch diameter, with a stainless steel binding strip around the edge and stainless steel tongues to fit the Eastman Head Screen. On one surface of this board, the aluminum foil coating is smooth; on the other, it has a pebbled grain.

Price, $4.00

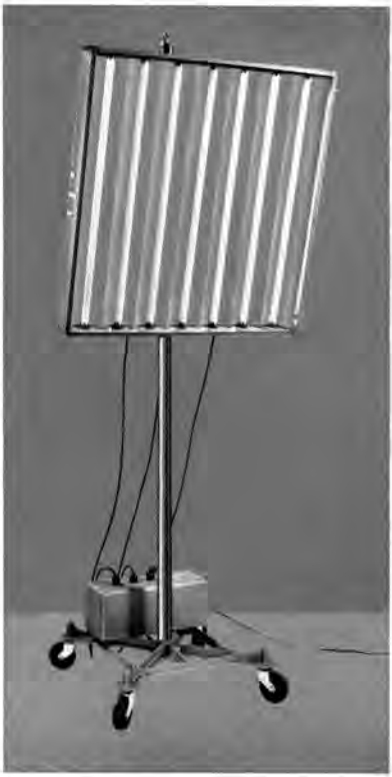
KODAK CONTROL FOR PHOTOFLOOD LAMPS

THE purpose of this device is to prolong the life of No. 1 and No. 2 Photoflood lamps and to reduce the heat and glare by operating these lamps at a reduced current while composing the subject.

The housing, with the words "Bright" and "Dim" printed in white, has four electrical outlets, into which may be plugged cords for equipment using six No. 1 Photofloods or three No. 2 Photofloods.

Price, $4.50

A NEW LIGHT...
Cool...Glareless



THE new Mazda Fluorescent Daylight Lamps offer portrait photographers an ideal and hitherto unavailable lighting medium. The chief advantages of the new lamps are as follows:

1. They are cool and hence make for greater comfort for both sitter and operator—an aid to better pictures.

2. Lighting is soft, evenly distributed and diffused, factors which, when combined with the lack of heat, permit placing the fluorescent units relatively close to the subject. Freedom from glare permits dispensing with tracing cloth or other types of diffusing screens which, at best, absorb about 50% of the light incident upon them.

3. When using the Daylight tubes, the color of the light is almost perfectly matched with daylight, securing excellent rendition with both orthochromatic and panchromatic emulsions.

4. Power consumption is low, a 36-inch tube, for example, only drawing 30 watts.

5. The life of Fluorescent tubes is long—2,000 hours—another important item in operating costs.

Mazda Fluorescent Lamps—and in photography either the Daylight or White Type may be used, although the former has proven the more popular—are available in a number of lengths as follows:

18-inch, 15-watt	$1.35
24-inch, 20-watt	1.90
36-inch, 30-watt	1.85
48-inch, 40-watt	2.70

Photographic Reflecting Equipment

There are a number of makes of Fluorescent photographic reflecting units available, which we can supply. In this article, we illustrate one of the Perkins lights, which are furnished in a number of models.

THE PERKINS "HI-POWER" 7–30 FLUORESCENT STUDIO LIGHT shown here accommodates seven 36-inch Fluorescent Tubes and provides an even flood of soft, diffused illumination. It can be tilted to any practical angle and raised to

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over 9 feet high or lowered to 18 inches from the floor. The stand is counterbalanced and the reflector may be revolved to any position without moving the stand. The stand model, complete except for lamps, lists at $210. The reflector only with yoke for overhead suspension, $145 without lamps.

THE PERKINS "HI-POWER" 5-30 FLUORESCENT LIGHT is similar to the 7-30 but takes five 36-inch tubes. Also, the stand is not counterbalanced. Price, complete with stand but without lamps, is $140, and reflectors only with overhead suspension yoke, $115.

A third model is offered in the PERKINS "HI-POWER" 4-20 FLUORESCENT LIGHT. This takes four 24-inch tubes and is constructed to provide greater carrying power, adding to its usefulness as a pointing-up light or as a supplementary light when used with the larger models. Price, complete with ball-bearing caster base, studio stand, raising from 3 to 10 feet high, $67.50 without lamps.

Protecto Photo Mailers

An extra quality distinctive photo mailer. It has two pieces of tough—not the ordinary brittle kind—corrugated board with the corrugations running at right angles—insuring safe delivery.

The envelope is of a strong, russet brown kraft paper with the flap gummed so that it may be sealed and sent by first-class mail, or the string tie may be used for third- and fourth-class mailing.

SIZE	SIZE OF BOARD	PRICE PER DOZEN	PRICE PER HUNDRED
A	5¾ x 8⅛	$ .55	$ 4.00
B	6⅝ x 10	.65	5.00
D	8½ x 10⅞	.80	6.00
CX	8¼ x 12	.80	6.00
E	10 x 13¼	1.05	8.00
F	12⅜ x 15	$1.25	$10.00
G	13 x 17	1.50	12.00
J	14¼ x 17¼	1.60	12.50
H	16¼ x 20⅛	2.15	17.00

Lots of 250 or more assorted, 5% Lots of 500 or more assorted, 10%
Lots of 1000 or more assorted, 15%

DISPLAYS THAT SELL

JUDGING from the appearance of many of the display cases of photographers, and the time that elapses between changes, one cannot help thinking that many studio owners do not realize the importance and value of window or showcase displays.

When you look at a big cut-out display card in a druggist's window, just stop and think what it costs, and why it is profitable for the manufacturer to spend large sums to get his products displayed. Actual tests show that a soap, or cold cream, or tooth paste will show an increase in sales as high as 400 per cent during the time an attractive display of the article is in the window.

Department stores will spend large sums for window dressing, knowing full well that these attractive displays will increase sales of the merchandise shown. Every window and display case has a very definite value, and the same is true of photographers' display cases and windows, but they are not always used to the best advantage.

People expect to see window displays changed every week and will look for the new display, but if you let it go for a month, interest is lost. Change your display often enough so that people will form the habit of looking at it and expecting something new.

Each display should express one idea. By this we mean that if you are suggesting pictures of children, confine the display to children. When you show pictures of men, make the display exclusively men's portraits. If you show a few of every kind of portrait, there can be no emphasis on any one.

If your display case is small, make up enough samples at one time for several changes, and never under any circumstances use prints which have been discarded because of some little fault. Make the very finest prints you can make for displays.

People don't buy things until they find that they want them, so you should make an effort to make people want photographs. The only way you can influence people who have not come into your studio is to tell them they should have photographs made. And the only way your display can give them a message is through the medium of printed words.

A printed or hand-lettered card with the following slogan will make people think: "The only gift that only you can give—your photograph." This slogan, suggesting that photographs are the most personal of all gifts, is quite likely to create a desire for photographs to solve personal gift problems. Every display you make should have some such sales argument to make people want photographs. Otherwise, your display falls short of its real purpose.

May we offer a final suggestion? Don't clutter up a case or window with a little of everything. Such displays create confusion. Interest one class of people at a time and you will do a much more thorough job. Change displays often and you will reach all classes, at one time or another, and reach them effectively.

Air Brush Equipment

WOLD AIR BRUSHES meet the many needs found in every studio for work on both negatives and prints. They are capable of smooth, graduated, delicate and subtle tones.

TYPES A-1 and A-2

THESE models have a range from a sharp clear hairline through all of the delicate gradations to a broad full spray, serving all photographic needs. The A-1 has the AA-1 interchangeable assembly. The A-2 has the adjustable air cap which allows a final adjustment to obtain just the desired effect.

Type A-1 - - - - - - - - - $22.00 Type A-2 - - - - - - - - - $23.00

TYPE "U" WOLD AIR BRUSH

THE type "U" has a special finger movement eliminating the backward motion of the lever. One presses straight down for a fine line; further down for a wash or wide spray.

Type "U" - $25.00

WOLD ELECTRIC AIR COMPRESSING UNITS

THESE Units provide enough air to operate two Air Brushes, having air reducers which adjust pressure from 0 to 50 pounds. A convenient hand switch is shown at the base. Features included are a ¼ h.p. motor, air purifier and filter, a 50-lb. air gauge, handle, 5 feet of C.W. rubber tubing and 5 feet of electric cord. The outfits are shipped assembled, ready to work.

The WP-10 is equipped with a diaphragm type compressor, while the WP-11 has a piston type compressor.

Type WP-10 A.C. - - - - - - $29.50
Type WP-11 A.C. - - - - - - 39.50

Prices on units with D.C. motors on request.

Extended Payments if Desired or 10% *Cash Discount*

EASTMAN KODAK STORES

PRINTS FOR HALFTONE REPRODUCTION

THE most suitable print for a halftone engraving depends largely upon the nature of the reproduction—whether it is to be printed on ordinary newspaper stock or on one of the finer enamel surfaced papers used for finer printing.

In either case, a glossy print is preferable, and it is always desirable to submit prints having a black tone. The print with an olive or sepia tone may seem more pleasing, but one must remember that photoengravers still use wet plates for screen negatives. This material is not at all sensitive to color, so the warm toned print is a hindrance to the reproduction of detail in halftone or shadow.

If the halftone is to be made with a screen as fine as is used in this magazine (133 lines to the inch), the print should have all the quality you can put into it. Make such prints on glossy Kodabrom, Velox, Azo or Illustrators' Special which, while not glossy, has a smooth surface. They should have brilliance but not too much contrast.

It should be understood that the finer screen halftones, used for printing on highly finished papers, will reproduce a greater number of tones than those of coarse screen used for newspapers which are printed on a coarse and uneven surfaced paper.

The newspaper halftone is usually made with a screen having 60 lines to the inch. The print that will make the best newspaper halftone, therefore, is one having a lot of contrast. Fine detail cannot be reproduced satisfactorily so is best eliminated. If you don't put sufficient contrast in the print for newspaper reproduction, the so-called newspaper artist will do it for you, and in so doing much of the likeness will be lost.

When you are making prints for newspaper reproduction it is suggested that you deliver them directly to the newspaper. They may be just what the newspaper wants, but your customer might think them poor prints.

If you have occasion to do commercial work for catalogue illustration, or some form of advertising, be sure to learn who will make the engravings and what screen will be used. Those most frequently used are 150, 133, 120, 110, 100, 80, 70, and 60-line. For 150 or 133-line halftones, give the engraver the finest black-and-white glossy print you can make. It should be a brilliant print, for when it is reproduced with printer's ink, on a paper which can't have as smooth a surface as your glossy print, some of its brilliance will disappear. For 120, 110, or 100-line halftones, step up the contrast of your print considerably without too much loss of quality. For 80, 70, or 60-line halftones you must sacrifice considerable quality for contrast. If you don't have the contrast in your print, the halftone, failing to differentiate between tones, will give a muddy and unsatisfactory reproduction.

Prints for rotogravure should be the same as for the finest halftones. The nature of this process permits the use of a very fine screen, but

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your prints should always be glossy or very smooth. If for any reason it is necessary to use a matte surfaced print for a halftone, give it a coat of vaseline and explain to the engraver what you have done. The vaseline will fill up the depressions of the paper surface and give more of the appearance of the glossy print.

The photographer should know as much as, or more about prints for halftone reproduction than, the engraver. If he does, and makes bold, brilliant negatives that make fine prints for reproduction, he will most likely get this business.

Straightens Professional Prints

Morse Print Straightener

THIS model was designed especially for the Portrait and Commercial Photographer and affords a quick and easy means of straightening the general run of prints.

Simple in design and with few moving parts, it consists essentially of a small steel roll running in pressure contact with a larger roll of soft sponge rubber. As prints are fed between the rolls, the firm, even pressure of the sponge imparts a slight reverse curl from edge to edge, leaving them in the ideal condition for mounting or delivery to your customers.

A pressure control is provided so that the desired amount of back curl may be obtained in different grades of paper.

Model UM-15, fifteen-inch capacity, 110-volt universal motor - - - $38.00

Extended Payments if Desired or 10% *Cash Discount*

EASTMAN KODAK STORES

AN ENLARGER *PLUS*

THE new Kodak Precision Enlarger is a versatile instrument with interchangeable condensers as well as lenses to accommodate an unusual range of negative sizes up to 2¼ x 3¼. It produces enlargements up to 16-diameters of a print quality comparable to that obtained with a diffuse type enlarger yet with the speed of a condenser machine.

Planned primarily for making fine enlargements, it may be quickly converted to such varied purposes as copying, the making of color separation negatives, matrices for color printing, photomicrography in color or black-and-white, or it may be used as a double extension bellows camera.

Prices below are for essential parts of the enlarger. Ask for a comprehensively descriptive booklet covering its various uses and accessories.

Kodak Precision Enlarger, including Stand Assembly, Bellows Assembly A, Condenser Head A with No. 2, 3, or 4 Condenser, 1 Glassless Negative Carrier, Lamp – – – – – – – – – – – – – – – $67.50

2-, 3-, or 4-inch Kodak Projection Anastigmat *f*/4.5 lens, $15.00, $17.50, $20.00

Kodak Masking Paper Board – – – – – – – – – – – – – – – $15.00

Extended Payments if Desired or 10% *Cash Discount to Professional Photographers*

EASTMAN KODAK STORES

Elwood Enlargers

NEW SPECIAL 5 X 7, MODEL SP

ENLARGES 5 x 7 negatives vertically up to six diameters and reduces to one-third. With the hinged upright in horizontal position, enlargements of any size can be made. Focuses by a large, convenient hand wheel; the fine focusing being done by rack and gear operating the bellows.

A new type of heat absorbing light filter and silvered reflector adapts the SP for enlarging on slow papers; now enlargements can even be made on chloride paper with only a 200-watt lamp.

Price, complete with 200-watt lamp, 7-foot extension cord and electric switch, but without lens (5″ or 7″ recommended) – – – $69.00

COMMERCIAL MODEL, 8 x 10

RIGIDLY and accurately built, this enlarger is operated with ease, the counterweighted body being raised and lowered by a large, gear-actuating hand wheel. Fine focusing is done by rack and pinion.

Enlarges 8 x 10 negatives up to 40″ x 50″ and reduces down to 3¼″ x 4¼″. The main stand is hinged and can be tilted back for horizontal projection.

A 21″ silvered and polished reflector gives perfect illumination and makes for short exposures. 200- to 400-watt lamps are accommodated.

Price without lens but including 200-watt light bulb – – – – – – – – – – $125.00

Extended Payments if Desired
or 10% Cash Discount

EASTMAN KODAK STORES

Now In An Improved Model

EASTMAN AUTO-FOCUS ENLARGER, MODEL C

CONSTRUCTION changes in the Eastman Auto-Focus Enlarger now permit the use of a 500-watt Mazda White Bulb Photo Enlarger Lamp. Illuminating efficiency is further increased by the polished aluminum finish on the inside reflecting surface of the lamphouse. Another addition is a sheet of heat-absorbing glass for negative protection.

The Model C takes negatives 5 x 7 inches and smaller, is always in focus, and with its fast lens and improved light source, operates at practically contact speed.

The degree of magnification is from 1½ to 4 diameters and with the reducing attachment in place, as shown in the illustration, prints as small as 1¾ x 2½ inches can be made.

Eastman Auto-Focus Enlarger, with Kodak Anastigmat 7½-inch *f*/4.5 Lens, Diffusing Disc Holder, No. 302 Photo Enlarger Lamp, Paper Holder, Foot Switch and Cord	$200.00
Reducing Attachment (extra)	30.00
Eastman Diffusing Discs, set of three	25.00
Extra Paper Holder	35.00
No. 302 500-Watt Mazda White Bulb Photo Enlarger Lamp	1.00

Extended Payments if Desired, or 10% Cash Discount

EASTMAN KODAK STORES

NEW METHOD OF SPEED DETERMINATION

AS the types of Eastman Films have increased in number there has been a demand for information regarding their effective speed and this is now available. In practice, the effective speed of a film must be judged from the final result, which is a print from a negative. For a number of years this matter has been the subject of study in the Kodak Research Laboratories, and a new system of speed has been devised from which effective camera speeds can be determined for the different films.

It has often been said that laboratory methods do not always agree with practical results obtained in everyday work, but in this case the practical methods were used as a basis for the laboratory research.

Test films were exposed on a carefully selected subject under controlled conditions, the exposure increasing so as to cover the whole range from under- to overexposure. Prints were made from each negative on papers of different contrast so that in each case it was possible to select the best print which that negative was capable of producing. The prints were judged by hundreds of people, and needless to say they did not agree on which was the best print in each case. Their selections, however, made it possible to determine for each material the least exposure for a print of quality.

From all of these practical tests it was then found possible to work out a sensitometric method which could be used as a laboratory routine and which would yield results entirely in agreement with the practical statistical method. Eastman film speeds published recently were obtained by means of this new method.

There is one significant way in which this method of speed evaluation differs from others which have been used. In it, the exposure on which the speed number is based is determined by a gradient, rather than a single density. This is important because the quality of a print is largely determined by gradient, or contrast, in the negative. It is density differences which determine the manner in which relative tone values will be reproduced in a print.

The speed figures given in recent Film Specification Sheets are based on the minimum exposure which will produce a negative capable of giving an excellent print. This exposure is 3 or 4 times as great as that necessary to produce a print which is just acceptable. The latter exposure represents the absolute minimum which should be given. Shorter exposures will result in negatives giving prints which are not acceptable.

The new values of speed are not comparable to the relative speeds formerly published by the Eastman Kodak Company, which were obtained by an inertia method, and they cannot be strictly compared with numbers obtained by any other system. Conversion tables are sometimes published but are inaccurate, for there can be no simple relationship between speeds obtained in fundamentally different ways.

NEGATIVE ON EASTMAN SAFETY
PORTRAIT PANCHROMATIC ANTI-HALATION FILM

RETOUCHING SOME OLD ONES

The foreman of one of the WPA projects found that, due to breakage and wear and tear, he had run short of shovels, so he wired to Washington requesting that more shovels be sent to him.

The next day he received a reply, which read: "Have no more shovels. Tell the men to lean on each other."

•

Boy—"Say, Dad, what does it mean when the paper says some man went to a convention as a delegate-at-large?"

Dad—"It means his wife didn't go with him, son."

•

A distinguished professor, while making a journey by rail, was unable to find his ticket when the conductor asked for it.

"Never mind, Professor," said the official, who knew him well, "I'll get it on my second round."

However, when the conductor passed through the coach again the ticket was still missing.

"Oh, well, Professor, it will be all right if you never find it," the conductor assured him.

"No, it won't," contradicted the Professor. "I've got to find that ticket. I want to know where I'm going."

•

"Sorry, madam, but licenses are issued only when your form is filled out properly."

"Why, I like your nerve, sir! We can get married, no matter what I look like."

•

"Why do you say that beautiful portrait of your wife was just a snapshot?"

"Well, it must have been. Her mouth was shut."

Accessories for the Baby Keg-Lite

Owners of that valuable piece of lighting equipment, the Baby Keg-Lite, which we again feature on pages 20 and 21, and those interested in it will find the following accessories of considerable value:

Snoots (set of 4) $7.00
These are used to hood the floodlight from the camera lens and produce circles of light.

Barn Door $5.00
This unit is used also for masking the floodlight. It consists principally of two wings—The entire unit can be revolved to mask the light in almost any position.

Low Bracket $3.50
This also fastens to the stand and permits the use of the light in low positions.

Turtle Weights (set) $11.00
The weights fit over the casters and make it quite impossible to upset the light, even though the stand be extended to full height.

Diffuser Box $2.50
This box fastens to the stand and holds the diffusing frame.

Diffuser Frames only	$ .80
Diffusing Medium—	
Honeycomb	.25
Heavy Glass Matt	.20
Thin Glass Matt	.20

Eastman Commercial Lens

THE superlative anastigmat qualities of this brilliant lens make it valuable for all types of commercial work. In addition, it is unequalled for making color separation negatives in accurate register. No lens offering such complete lateral correction has previously been available. Numbered test plates are made with each lens for reference.

The Eastman Anastigmat Ektar *f*/6.3 Lens—14-inch—has wide coverage allowing full use of the adjustable front and back of 8 x 10 cameras. The model without shutter has a new type, lightweight, all-aluminum barrel with "click" diaphragm stops. The shutter model is mounted in an Ilex Shutter with time bulb, 1-, ½-, 1/5-, 1/10-, 1/25-, 1/50-second action.

Two lens caps and a sturdy, velvet-lined, wooden box for protection against damage are included.

Price: Eastman Anastigmat Ektar *f*/6.3 Lens, 14-inch, in barrel – – – – – – – – – – – – – $175.00

Eastman Anastigmat Ektar *f*/6.3 Lens, 14-inch, in Ilex Shutter – – – – – – – – – – 205.00

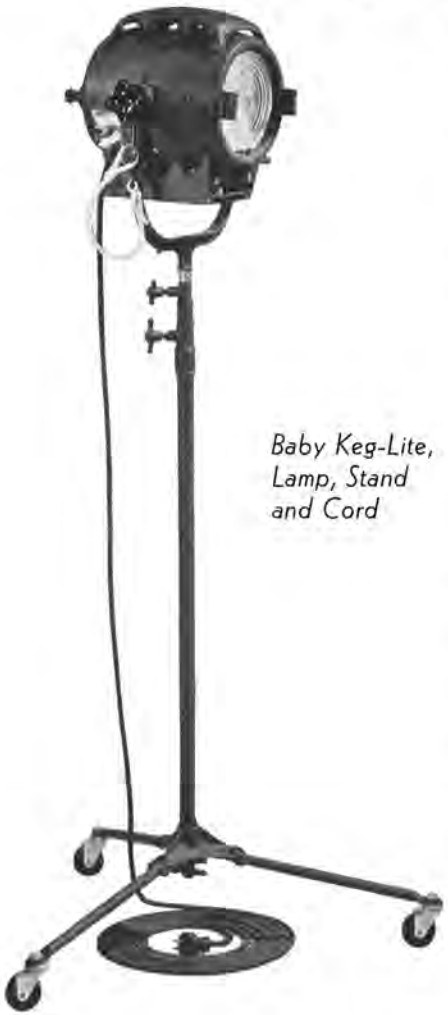
Extended Payments if Desired or 10% *Cash Discount*

EASTMAN KODAK STORES

The Baby Keg-Lite

THE product of a leading firm of electrical engineers specializing in the manufacture of lighting equipment for Hollywood motion picture studios, the Baby Keg-Lite brings to the profession a lighting medium of exceptional versatility in portrait, commercial, and illustrative photography.

Baby Keg-Lite Features . . .



Baby Keg-Lite, Lamp, Stand and Cord

INSTANT FOCUSING

A slight pressure on a control conveniently accessible from front or back of the lamp instantly spreads the beam to any desired angle from a 4-degree spot to a 50-degree flood. A calibrated scale, giving focusing arm position, enables you to duplicate any desired lighting effect. With this unique device shadows, colors and light quality may be compared, studied and analyzed in a manner heretofore impossible. This is an exclusive feature.

INTENSITY

The light output of Baby Keg-Lite is *three times* greater than the average photographic light of equal wattage with conventional optics.

LIGHT FIELD

At any degree from spot to flood the field is clear and even.

ADAPTABILITY

Weighing but 25 pounds, Baby Keg-Lite is easily handled. Stand reaches up to eight and one-half feet—has folding castered base. Uses 500- or 750-watt globes—type T-20 or T-24 with medium bipost base.

COLOR

Excellent for color photography.

and Foco Spot

The Foco Spot is an optical accessory which fits in the diffuser clips of the Baby Keg-Lite

ITS purpose is to develop a concentrated beam with sharp edges, either round or rectangular. A revolving disk with several sizes of round apertures will, at a distance of fifteen feet, provide brilliant circles of even light in sizes from 3¾″ to 8′ 6″ in diameter. Rectangular shapes are obtained by four sliding mats; these rectangles may be rotated to suit the object.

For concentrated highlights, special shadow and silhouette effects, the Foco Spot is an ideal photographic tool.

As an accessory to the Foco Spot, a background slide may be purchased at a slight additional cost. Original designs may be drawn or painted on the glass slides and projected on the background.

Baby Keg-Lite with Foco Spot Attached

PRICES

BABY KEG-LITE:

Complete with double riser collapsible stand, 25 feet of rubber-covered cable, and plug—without globe – – – – – – – – $55.00

FOCO SPOT ATTACHMENT:

With rotating disk and adjustable mats – – – – – – – – – 25.00

BACKGROUND SLIDE:

With five clear and one heatproof glass slide – – – – – – – 2.50

MAZDA LAMPS USED IN KEG-LITE

500-Watt T-20 Clear C-13 medium bipost—either 3200°K or C.P. 3380°K – – – – – – net 4.25

750-Watt T-24 Clear C-13 medium bipost—either 3200°K or C.P. 3380°K – – – – – – net 5.50

Foco Spot

Extended Payments if Desired or 10% Cash Discount

EASTMAN KODAK STORES

NEW
5 x 7 Film Tank

THE NO. 1 5 x 7 LUZERNE HARD RUBBER DEVELOPING AND FIXING TANK is designed for use with 5 x 7 and No. 4A Eastman Film and Plate Developing Hangers, taking a dozen at one time. It holds a gallon of solution.

The hangers rest on an inner ledge of the tank, so that when the cover is in position the unit is light tight, permitting turning on darkroom lights during development.

Construction is of tough, natural rubber, which will withstand heavy usage.

No. 1 5 x 7 Tank only – – – – – – – – – – – – – – – – – $6.75
Cover for above – – – – – – – – – – – – – – – – – – – 2.00

A similar tank accommodating twenty 5 x 7 or twelve 8 x 10 hangers is available at $9.75; cover extra, $2.50.

EASTMAN FILM AND PLATE DEVELOPING HANGER NO. 4A

THESE metal hangers remove the necessity for handling wet films or plates and insure better and cleaner results. Either films or plates may be processed and dried without removing from hangers. In the No. 4A the film slides through side channels into an end channel, and is held in place by the hinged top.

Sizes 3¼ x 4¼, 4 x 5, 4¾ x 6½ or 5 x 7 each – – – – – – – – – $ .60
Sizes 6½ x 8½ or 8 x 10, each – – – – – – – – – – – – – – .75

EASTMAN KODAK STORES

NEW MIDGET PHOTOFLASH LAMP

ON the occasion of the 10th anniversary of the Photoflash Lamp's debut in America, General Electric Company announces the world's smallest, practical Photoflash Lamp. Smaller even than a golf ball, this ingenious little flash bulb, wire-filled Mazda Photoflash Lamp No. 5 has been designed for use with all cameras except those of the focal plane shutter type.

More than two dozen of the peewee lamps can be carried in the pocket of a suit coat—more than three dozen in an overcoat pocket. The wide range of pictures taken by the powerful flash of the No. 5 lamp proved to be as sharp and clear as shots of the same subjects taken with much larger flash lamps. For its size, it gives more light—nearly a million lumens at peak of flash—than any other photo lamp commercially available.

Mazda Photoflash Lamp No. 5 has a bayonet type base, like the base of many lamps used in automobile service. It is designed for rapid-fire loading and unloading in reflector equipment, yet locks firmly in its socket. Adapters for fitting it to existing flash equipment are available.

The bulb of the new lamp is protected both inside and out with a lacquer safety jacket. The outer jacket is intentionally tinted with a dye which in no way interferes with the photographic effectiveness of the light produced. The purpose of the dye is twofold. In the factory it permits inspectors to determine quickly and accurately whether the lacquer protection has been properly applied. Elsewhere the yellowish hue gives proof that the bulb has been provided with an outer safety jacket as well as an inner one.

Because of its compactness, the No. 5 Lamp lends itself to use in smaller and less cumbersome reflector equipments and in spot-type projectors for long-range night-picture "takes" outdoors as well as for spot lighting effects indoors.

Essential technical data on the new midget lamp are as follows:

Bulb	B11
Bulb Filling	All Wire
M.O.L. (Pub.)	2½"
Base	S.C. Bayonet
Light Output	13,000-15,000 Lumen Seconds
Peak Lumens	900,000
Voltage	*
Std. Pkg.	Quantity 60
List Price	20 Cents

*Flash with dry cells only (two or more).

A Quiet, Rich Easel

WHITE GRAY

THE PATRICIAN

A DISTINCTIVE easel for your exacting customers who want the best.

The insert design embodies the popular silver beveled edge at opening, set in a soft etched tint.

This is one of the styles you need for good priced portraits. Become acquainted with it—for 15 cents we will send a sample of the 4 x 6 size and include the ARISTOCRAT, a companion folder style.

EASTMAN KODAK COMPANY
(TAPRELL, LOOMIS DIVISION) CHICAGO, ILLINOIS

PEOPLE WHO CAN'T BE PHOTOGRAPHED

YOU have probably run across a sitter who frankly admits she can't be photographed. No one has ever made a satisfactory photograph for her, and she never expects to have one that even her friends will like. But she must have a portrait made for some purpose, so you have the job.

What is the best thing for you to do under such difficult circumstances?

The logical thing, of course, is to please, if it is possible. You have been put on the spot and your reputation is at stake. We suggest, that first of all, you get in the right state of mind by accepting the thought that you might not make a profit on this particular sitting. You can be a lot more gracious if you make up your mind to play the game, win or lose.

If the sitting is to be made at once, spar for time. This woman may not be beautiful, but if someone wants pictures of her she must be interesting, or have personality, or she would have no occasion to have a portrait made. Get her into the studio and place her in a comfortable chair, but not a posing chair. Sit down and talk the matter over so that you can become familiar with her likes and dislikes. Ask why previous portraits have not, in her mind, been successful.

If you have managed to put her at her ease and have shown real interest in her problem, she will probably give you the reason for her previous disappointments. And during the conversation you will have opportunity to watch her expression, and note what you think are characteristic poses.

She has probably had an idea you would put her in a posing chair and twist her head into the position you thought it should have. The very fact that you have made her comfortable and propose to make a portrait of her just where she is sitting may so appeal to her that she will like the results.

You may be sure that the woman who has made up her mind that a photograph isn't going to please her is not going to be satisfied with a stereotyped portrait, so you must make up your mind to do something out of the ordinary. Watch for an unusual pose, keep up a conversation to get expression, fake an exposure and then snap the shutter as the sitter relaxes. Use all of your bag of tricks to get some real informal shots. Don't admit or even suggest failure. Be nonchalant. It will give the sitter confidence and help to create satisfaction.

Be sure to inspect every one of the negatives you have made, before they are proofed. Throw out any that are really bad, and carefully correct and proof retouch the others. It may be that on previous occasions poor proofs with uncorrected faults have been the cause of this customer's dissatisfaction. Don't let it happen with your sitting. If your proofs show none of the faults this customer looks for, you may make a staunch booster for your studio and

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the difficult sitting may bring you a lot of business.

On the other hand, if you make some fine negatives and she insists the proofs are terrible, you won't help matters by refusing to admit it. Tell her you wouldn't think of allowing her to order pictures from proofs she doesn't like, and insist that she have another sitting. Of course it is advisable to try to learn what her objection is. Ask her to give you her frank criticism and help you to make a portrait her friends will like. However, don't refuse to let her have the proofs to show her friends. They may be so pleased with them that she will change her mind.

If she is willing to have a second sitting, don't allow her unfair criticism to get you down. Take it with good grace. She may be much easier to please with the second sitting. If you don't feel like being gracious, just stop and think what a lot of unkind things she might say about you.

Be generous and you will probably take all the wind out of her sails and make her a booster for you and your studio. No one ever gained anything by allowing temper to get the upper hand in dealings with a woman customer. Advertising will get new business but the most certain way to make old business repeat is to please every sitter.

People who insist they can't be photographed may give you a lot of trouble, but it is good training to follow through and win their confidence and good will.

Advertising Display Suggestion

IS your last portrait a true likeness of the man you are today? Half an hour of your time is all we need for the portrait your family, friends, and associates will say is you.

Call us for a lunch-time appointment

THE HYLAND STUDIO

For Color Work

The Cooke Planital

MODERATELY PRICED

THE Planital is an apochromatic lens of the highest quality and will be found of special value for copying, color separation and all critical work for the engraver, the illustrator and the commercial photographer. The moderate price will please you.

There is a Cooke Lens for every photographic need. An illustrated catalogue will be sent upon request, showing the sixteen series of Cooke Lenses available.

APPROXIMATE EQUIVALENT FOCUS INCHES	FULL APERTURE	PLATE COVERED AT FULL APERTURE: OBJECT AND IMAGE SAME SIZE INCHES	IMAGE HALF-SIZE OF OBJECT INCHES	PRICE
16½	*F*/12.5	18 x 16	15 x 12	$212.00
19	*F*/12.5	22 x 17	18 x 14	227.50
24	*F*/15	24 x 20	22 x 18	319.50

Available on Ten Days' Trial

EASTMAN KODAK STORES

IT'S AGAINST THE LAW

THE Professional Photographer, which is the official journal of The Photographers' Association of America, gives a timely warning regarding the copying of government documents of any nature which might be brought to the photographer.

It should be well known that it is unlawful to make a photographic copy of postage stamps, currency, or any other obligation of the United States Government, but it may not be so well known that it is also unlawful to make photographic copies of citizenship or passport papers.

While this prohibition has existed for a number of years, it may not be generally known. In view of conditions abroad, however, and the great importance of passports and citizenship papers to persons engaged in espionage activities, it is readily seen how the photographer might innocently be involved in a serious law violation were these things not taken into account.

The law, which dates back to 1909, reads in part: "Whoever shall in any manner cause to be printed, photographed, made or executed, any print or impression in the likeness of any such certificate or any part thereof, shall be fined not more than $10,000 or imprisoned not more than ten years, or both."

A prior section of the law indicates that this prohibition is intended to refer to any and all citizenship documents of the United States. This, through a recent ruling of the United States Supreme Court, is now broadened to include United States passports, the other documents being citizenship papers or certificates of naturalization. While the prohibition does not apply to similar papers of other countries, in the present state of foreign affairs requests to photograph any documents of this type should be regarded with some degree of suspicion, and before any such work is undertaken it would be best to consult the nearest consular office of the country from which the papers originate.

It might seem quite logical to you that a man of foreign birth, who has become an American citizen, would be so proud of the fact that he would want his papers of proof photographed. Be that as it may, it is against the law and you can't do it. You might find yourself involved in a plot to forge citizenship papers for purposes which would be detrimental to the interests of our government.

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TRACEOLENE

A thin, flexible, semi-transparent material of many photographic uses. Excellent as a light diffuser because it will not discolor when placed before studio lamps. Also diffuses well in printing because free of grain. Being moistureproof, it can be used in printing from wet negatives. Has an etched surface for working up with pen, pencil or airbrush.

Package of 10 sheets, 8 x 10	$ .75
Package of 10 sheets, 11 x 14	1.50
Roll, 140 inches long x 22 inches wide	2.80
Roll, 600 inches long x 40 inches wide	15.00

NEGATIVE ON EASTMAN SAFETY
SUPER-XX PANCHROMATIC ANTI-HALATION FILM

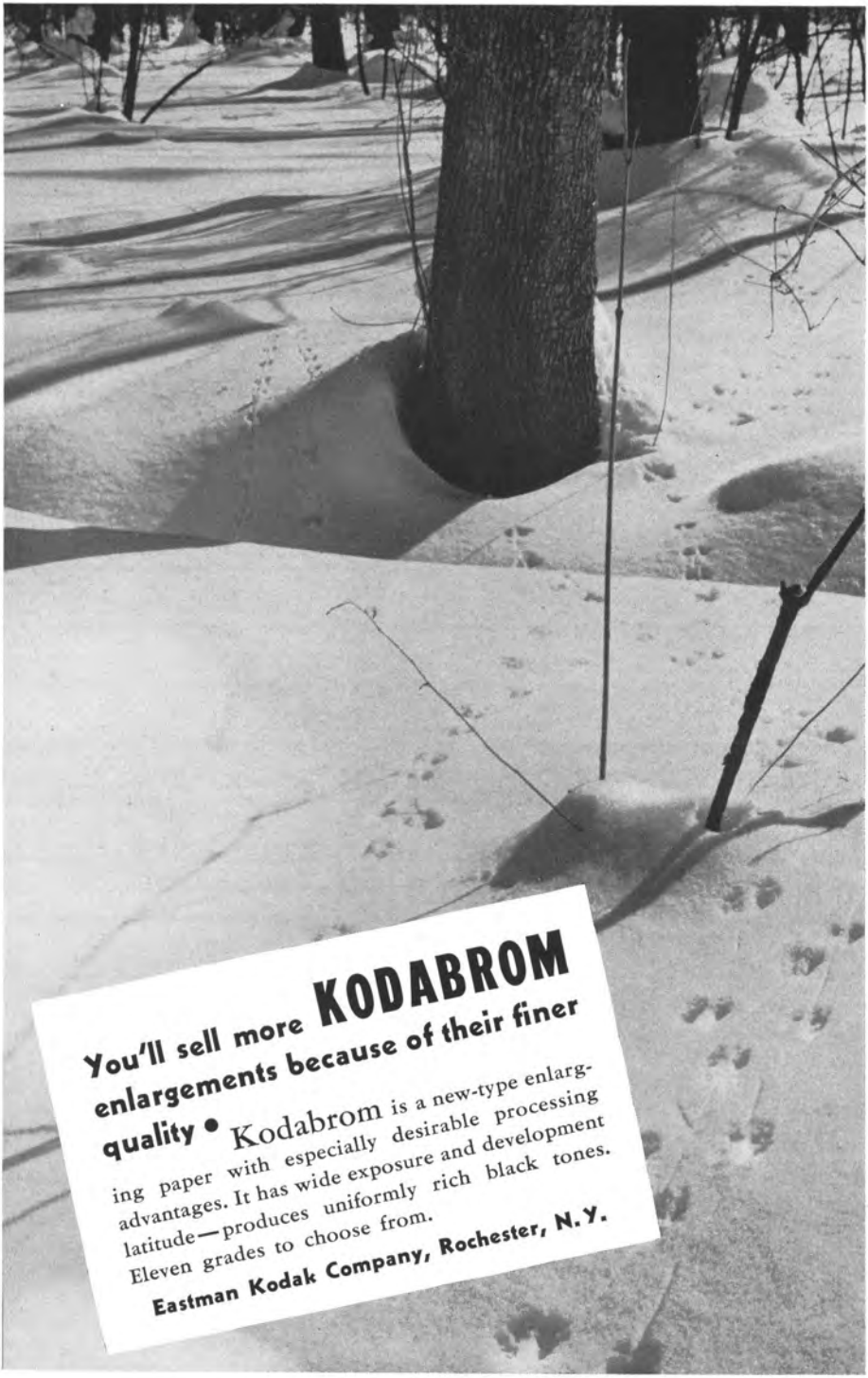
TRI-X PANCHROMATIC

SOLVES THE SPEED-QUALITY PROBLEM

SPEED alone is not enough in modern commercial and illustrative photography. There must also be depth, gradation, modeling, fine rendering of flesh tones. Tri-X Panchromatic gives you speed plus these qualities. The unretouched illustration above is from an 8 x 10 negative, made with 14-inch Ektar lens, f/16, 1/75 second, with front illumination of only 2 No. 1 Photofloods. Eastman Kodak Company, Rochester, N. Y.

TRI-X PANCHROMATIC

FOR EXTREME SPEED PLUS QUALITY


You'll sell more KODABROM enlargements because of their finer quality • Kodabrom is a new-type enlarging paper with especially desirable processing advantages. It has wide exposure and development latitude—produces uniformly rich black tones. Eleven grades to choose from.
Eastman Kodak Company, Rochester, N.Y.

FINE EASTMAN ASSORTMENTS FOR HOLIDAY PHOTO TRADE

Spot a Camera Assortment on Every Dealer's Counter

Eastman's 462 Christmas Assortment features the snappy new Baby Brownie Specials, but includes as well four other Eastman cameras—all in colorful Christmas wrappers—all fast sellers. Card with assortment brings retailer a colorful Kodak Christmas display piece.

NO. 462 EASTMAN CHRISTMAS ASSORTMENT

6 Baby Brownie Specials @ $1.25	$ 7.50
1 Bullet Camera	2.00
1 Kodak Bantam *f*/8	3.95
1 Six-20 Bull's Eye	2.75
1 Six-20 Brownie Special	3.75
Total retail value	$19.95
Suggested distributor's price to retailer	13.42

Sell Fast Films and Lighting Kits To Up Photofinishing

No. 453 Assortment contains thirty rolls of Kodak Super-XX Film as listed below . . . six Snapshots-at-Night Lighting Kits, and Counter Displayer (illustrated). These Kits each contain two Kodak Reflectors Model C, one No. 1 and one No. 2 Mazda Photoflood Lamp—retail for 75c.

6 rolls No. XX127 Kodak Film @ 30c	$ 1.80
6 rolls No. XX120 Kodak Film @ 35c	2.10
6 rolls No. XX620 Kodak Film @ 35c	2.10
6 rolls No. XX116 Kodak Film @ 40c	2.40
6 rolls No. XX616 Kodak Film @ 40c	2.40
6 Snapshots-at-Night Lighting Kits (details above) @ 75c	4.50
Total retail value	$15.30
Suggested distributor's price to retailer	10.20

Order Now from Your Usual Source of Eastman Supplies

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

Use Tested Chemicals

BY using chemicals of certain strength and purity, most of your processing troubles will be avoided. That's why Eastman Tested Chemicals, manufactured under laboratory control, are recommended in all Eastman formulas. It's worth your while to be sure. Eastman Kodak Company, Rochester, N. Y.

Specify

EASTMAN **TESTED CHEMICALS**

BETTER PRINTS

MAKE BETTER SALES

QUALITY in your portraits depends upon the ability of the print to reproduce the quality of your negatives. The majority of photographers use Vitava Opal because it reproduces the finest gradations of light and shade in rich and brilliant prints, with pleasing warmth of tone. Eastman Kodak Company, Rochester, N. Y.

VITAVA OPAL PAPER

FOR ENLARGEMENTS OF CONTACT PRINT QUALITY